

What is claimed is:

1 1. A method of optimizing a shopping list process, comprising steps of:
2 obtaining a shopping list comprising one or more items;
3 obtaining one or more factors which a user wishes to use in optimizing a shopping path for
4 the items on the shopping list;
5 determining one or more merchants and locations thereof where the items may be
6 purchased; and
7 computing the shopping path to visit selected ones of the merchants, wherein the
8 merchants are selected according to the one or more obtained factors.

1 2. The method according to Claim 1, wherein one of the obtained factors is to optimize a
2 path length for the shopping path.

1 3. The method according to Claim 1, wherein one of the obtained factors is to optimize a
2 purchase cost for the items on the shopping list.

1 4. The method according to Claim 1, wherein one of the obtained factors is to optimize a
2 number of merchants on the shopping path.

1 5. The method according to Claim 1, further comprising steps of:
2 traveling to each successive merchant on the computed shopping path;
3 purchasing zero or more items from the shopping list at each merchant; and

remembering which items have been purchased.

6. The method according to Claim 5, further comprising steps of:
creating a revised shopping list which excludes the remembered items; and
determining whether items expected at a particular one of the merchants were available for
purchase, and if not, recomputing the shopping path after adding the items which were unavailable
to the revised shopping list.

7. The method according to Claim 1, wherein the shopping path begins from an identified
starting location and terminates at an identified ending location, which may be identical to the
starting location.

8. The method according to Claim 1, wherein one or more traveling salesman algorithm
implementations are used by the computing step.

9. The method according to Claim 1, wherein the merchants are dynamically contacted to
determine availability of the items on the shopping list.

10. The method according to Claim 5, further comprising the step of computing a summary
after visiting the selected merchants, wherein the summary comprises information pertaining to
one or more of: which merchants were visited; the remembered items which were purchased; a
cost of the remembered items which were purchased; a count of merchants visited; a cost savings

of the remembered items which were purchased.

11. A system for optimizing a shopping list process, comprising steps of:

means for identifying one or more items on a shopping list;

means for identifying one or more factors which a user wishes to use in optimizing a shopping path for the identified items;

means for determining one or more merchants and locations thereof where the identified items may be purchased; and

means for computing the shopping path to visit selected ones of the merchants, wherein the merchants are selected according to the one or more identified factors.

12. The system according to Claim 11, further comprising means for remembering which items from the shopping list have been purchased while traveling to each successive merchant on the computed shopping path.

13. The system according to Claim 12, further comprising:

means for creating a revised shopping list which excludes the remembered items; and

means for determining whether items expected at a particular one of the merchants were available for purchase, and if not, recomputing the shopping path after adding the items which were unavailable to the revised shopping list.

14. A computer program product for optimizing a shopping list process, the computer

2 program product embodied on one or more computer-usable media and comprising:

3 computer readable program code means for identifying one or more items on a shopping
4 list;

5 computer readable program code means for identifying one or more factors which a user
6 wishes to use in optimizing a shopping path for the identified items;

7 computer readable program code means for determining one or more merchants and
8 locations thereof where the identified items may be purchased; and

9 computer readable program code means for computing the shopping path to visit selected
10 ones of the merchants, wherein the merchants are selected according to the one or more identified
11 factors.

1 15. The computer program product according to Claim 14, further comprising computer
2 readable program code means for remembering which items from the shopping list have been
3 purchased while traveling to each successive merchant on the computed shopping path.

1 16. The computer program product according to Claim 15, further comprising:

2 computer readable program code means for creating a revised shopping list which
3 excludes the remembered items; and

4 computer readable program code means for determining whether items expected at a
5 particular one of the merchants were available for purchase, and if not, recomputing the shopping
6 path after adding the items which were unavailable to the revised shopping list.